

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a cell, thereby silencing the function of a target gene.
2. (Previously Presented) The isolated RNA of claim 1, wherein the artificial intron RNA contains a splice donor site a splice acceptor site, a branch site ψ , and a poly-pyrimidine tract.
3. (Previously Presented) The isolated RNA of claim 1, wherein the cell is a mammalian cell.
4. (Previously Presented) The artificial intron RNA of claim 2, wherein the splice donor site contains 5'-AGGUAAGU-3'.
5. (Previously Presented) The artificial intron RNA of claim 2, wherein the splice acceptor site contains 5'-CCACAGC-3'.
6. (Previously Presented) The artificial intron RNA of claim 2, wherein the branch site contains 5'-UACUAAC-3'.

7. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene.
8. (Currently amended) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene, wherein the artificial intron RNA contains a splice donor site that includes 5'-AGGUAAGU-3', a splice acceptor site that includes 5'-CCACAGC-3', a branch site that includes 5'-UACUAAAC-3', a poly-pyrimidine tract that includes 5'-UUCUUUUUUUC-3' (SEQ ID NO: 2), or a combination thereof.
- 9-10. (Canceled)
11. (Original) A cultivated cell comprising the isolated RNA of claim 1.
- 12-18. (Canceled)
19. (Original) A composition comprising the isolated RNA of claim 1.
- 20-57. (Canceled)